

Amendments to the Claims: Please amend the claims as shown. Applicants reserve the right to pursue any canceled claims at a later date.

1-7. (canceled)

8. (currently amended) A communication network comprising:

a plurality of communication components, at least some of which comprise both client and server functionalities, at least some of the client functionalities including a search function that ascertains network addresses of others of the communication components that allow the server functionalities of the others to be used;

a retrieval mechanism in said at least some of the client functionalities that obtains information about the server functionalities of said other communication components; and

wherein the server functionalities provide usable services in the communication network

wherein a server functionality is selected for use by a client functionality using a state information comprising a current utilization level of each of the server functionalities and the cost to use each of the server functionalities.

9. (previously presented) The communication network as claimed in Claim 8, wherein the communication network provides for a self-administration on the basis of the information ascertained by the search functions.

10-13. (canceled)

14. (previously presented) The communication network as claimed in Claim 8, wherein the client functionality is designed to retrieve an authorization before using a server functionality.

15. (previously presented) The communication network as claimed in Claim 14, wherein at least one server functionality is provided for managing the authorization.

16. (currently amended) A method of communication within a network, comprising:
providing a plurality of communication components with both client and server functionalities;

ascertaining via a search function of the client functionality of at least some of the communication components an address of at least some others of the communication components that allow the server functionalities of said some others to be used; and

retrieving information about the server functionality of said some others of the communication components by the client functionality of said at least some of the communication components;

wherein the server functionalities provide services in the communication network;

wherein one of the server functionalities is selected for use by one of the client functionalities using a state information comprising a current utilization level of each of the server functionalities and the cost to use each of the server functionalities.

17. (previously presented) The method as claimed in Claim 16, further comprising providing a self-administration based of the information ascertained by the search functions.

18. (previously presented) The method as claimed in Claim 16, wherein a plurality of search functions are contained in the communication network and in the communication components.

19-21. (canceled)

22. (previously presented) The method as claimed in Claim 16, wherein the client functionality is designed to retrieve an authorization before using a server functionality.

23. (previously presented) The method as claimed in Claim 22, wherein at least one server functionality is provided for managing the authorization.

24. (previously presented) The method as claimed in Claim 16, wherein the current address of all of the communication components are ascertained.

25. (previously presented) The method as claimed in Claim 16, wherein the server functionality of all of the communication components are retrieved.

26. (canceled)

27. (new) The communication network as claimed in Claim 8, wherein:
each of the communication components searches for neighboring ones of the communication components and creates a servent list of the neighboring communication components; and

each of the communication components maintains the current utilization level of each server functionality of the neighboring communication components in the servent list by performing a repeating search at timed intervals.

28. (new) The communication network as claimed in Claim 27, wherein:
one of the communication components performs a gateway search for a gateway among the neighboring communication components in the servent list;

a first of the neighboring communication components comprises a first gateway, and returns a first hit response to said one communication component;

a second of the neighboring communication components does not comprise a gateway, and forwards the gateway search to additional neighboring communication components of the second neighboring communication component; and

one of the additional neighboring communication components comprises a second gateway, and returns a second hit response to said one communication component.

29. (new) The communication network as claimed in Claim 28, wherein said one of the communication components chooses one of the gateways for use based on a respective number of available channels on each gateway and a respective propagation time for the first and second hit responses.

30. (new) The method as claimed in Claim 16, wherein:
each of the communication components searches for neighboring ones of the communication components and creates a servent list of the neighboring communication components; and

each of the communication components maintains the current utilization level of each server functionality of the neighboring communication components in the servent list by performing a repeating search at timed intervals.

31. (new) The method as claimed in Claim 30, wherein:
one of the communication components performs a gateway search for a gateway among the neighboring communication components in the servent list;

a first of the neighboring communication components comprises a first gateway, and returns a first hit response to said one communication component;

a second of the neighboring communication components does not comprise a gateway, and forwards the gateway search to additional neighboring communication components of the second neighboring communication component; and

one of the additional neighboring communication components comprises a second gateway, and returns a second hit response to said one communication component.

32. (new) The method as claimed in Claim 31, wherein said one of the communication components chooses one of the gateways for use based on a respective number of available channels on each gateway and a respective propagation time for the first and second hit responses.